

REMARKS

I. GENERAL

Claims 1-4, 7-34, 36-47, and 62-75 are pending in this application.

- Claims 1, 2, 6, 10, 11-13, 28-33, 36-38, 42, 64, and 70 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 5,802,177 to Daniel et al. (hereinafter “*Daniel*”) in view of U.S. Patent No. 5,504,742 to Kakuma et al. (hereinafter “*Kakuma*”).
- Claims 3 and 39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* in further view of U.S. Publication No. 2002/0196749 to Eyuboglu et al. (hereinafter “*Eyuboglu*”).
- Claims 4 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of U.S. Publication No. 2002/0174441 to Marin et al. (hereinafter “*Marin*”).
- Claims 7, 8, 62, 63, 67, and 73 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of U.S. Patent No. 6,275,990 to Dapper et al. (hereinafter “*Dapper*”).
- Claims 9, 14, 34, 45, 65, 68, 71, and 74 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of U.S. Patent No. 6,865,170 to Zendle (hereinafter “*Zendle*”).
- Claims 15-20, 47, 66, and 72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of U.S. Publication No. 2002/0126704 to Cam et al. (hereinafter “*Cam*”).
- Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and *Cam* and further in view of U.S. Publication No. 2003/0043738 to Barsheshet (hereinafter “*Barsheshet*”).

- Claims 22, 43, 44, 69, and 75 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of U.S. Patent No. 6,704,579 to Woodhead et al (hereinafter “*Woodhead*”).
- Claims 23-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and *Woodhead*, as applied to claims 22, 43 and 44, and in further view of U.S. Publication No. 2003/0161386 to Schilling (hereinafter “*Schilling*”).
- Claims 41 and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of *Barsheshet*.

Applicant hereby traverses the rejections of record and requests reconsideration and withdrawal of such in view of the remarks contained herein.

II. CLAIMS AMENDMENTS

Claims 1, 7-9, 33, and 47 are amended herein. Specifically, independent claim 1 has been amended to include the subject matter of claim 6, which effectively rewrites claim 6 in independent form. Independent claim 33 has been amended to incorporate the subject matter of dependent claim 47. As such, the scope of claims 1 and 33 is not altered in any way. The above amendments should be entered after final because they do not raise new issue that would require a new search, and they place the claims in better condition for either allowance or appeal. *See* M.P.E.P. § 714.12. These claims are believed to be allowable over the rejection raised under 35 U.S.C. §103 (for the reasons discussed below). Further, support for these amendments is found in the specification at, e.g., the original claims and paragraphs [0029]-[0030], [0034]-[0035], and [0038]-[0039]. Accordingly, claim 6 has been canceled and claim 47 has been amended to reflect the change. As such, no new matter has been added.

III. REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-4, 6-34, 36-47, and 62-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and further in view of other cited references. In

rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a *prima facie* case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR Int'l. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Applicant. *Piasecki*, 745 F.2d at 1472, 233 USPQ at 788. Thus, the Examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the Examiner's conclusion. Moreover, to support an obviousness rejection, "[u]nder § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved." *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 15 - 17 (1966). As will be discussed, with regard to the rejections under 35 U.S.C. § 103(a), the Examiner has failed to show that the pending claims are obvious.

- A. Claims 1, 2, 6, 10, 11-13, 28-33, 36-38, 42, 64, and 70 are rejected under 35 U.S.C. § 103(a) as being unpatentable in view of *Daniel* and in view of *Kakuma*.

Improper Combination

The disclosures of the references are not sufficient to render the claims *prima facie* obvious where the combination of the references requires substantial reconstruction and redesign of the primary reference or the combination would change the principle of operation of the primary reference. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (emphasis added); *see also* M.P.E.P. § 2141.01. Here, the Examiner asserts that because *Kakuma* discloses providing a subscriber interface providing a broadband interface compatible with broadband protocol, it would be obvious to replace the ISDN subscriber interface of *Daniel* with a broadband ISDN interface, as disclosed by *Kakuma*. *See* Final Action, pages 7-8. However, the Examiner's reliance on *Kakuma* is misplaced because combining *Daniel* with *Kakuma*, as proposed by the Examiner, would require substantial redesign and reconfiguration of *Daniel*. For instance, *Kakuma* discloses a broadband ISDN remote multiplexer that is located at a remote

location near the subscribers to concentrate a large number of subscriber lines and to multiplex these lines on a broadband transmission line. *See* Abstract and column 1, lines 21-26. As such, *Daniel* would require significant modifications in order to receive and process broadband signals. In other words, *Daniel* would have to be modified to concentrate a large number of subscriber lines, to multiplex the subscriber lines, and to communicate with the ATM exchange in broadband protocols, all of which require significant changes to the hardware, software, and circuitry of *Daniel*'s ITS 13. Therefore, the disclosures of the references are not sufficient to render the claims *prima facie* obvious because the combination of the references requires substantial reconstruction and redesign of *Daniel*.

Further, Applicant respectfully notes that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); *see also* M.P.E.P. § 2141.02 (VI). In this case, *Daniel*'s ITS 13 is "an indoor unit providing the telephone socket within the customer premises" (*see* column 3, lines 49-51), while *Kakuma*'s broadband ISDN remote multiplexer is located at a distant location from the subscribers (*see* column 4, lines 65-67) (emphasis added), *see also* column 1, lines 23-27. Thus, *Kakuma* actually teaches away from the proposed combination because the combination would result in *Daniel*'s ITS 13 being located at a distant location from the customer premises and not "within the customer premises" as required by *Daniel*. *See Daniel*, column 3, lines 49-51. The Examiner cannot focus on *Kakuma*'s disclosure of a broadband subscriber interface and ignore its other teachings. Therefore, there is no motivation to combine *Daniel* with *Kakuma*.

Independent Claims 1, 33, 64, and 70

Independent Claim 1, as amended, recites "wherein said first subscriber system provides only digital processing of said subscriber data" (emphasis added). Claims 33, 64, and 70 recite a similar limitation. The Examiner asserts that the Intelligent Telephone Socket (ITS) 13 disclosed by *Daniel* at column 3, line 48 to column 4, line 3, and Figure 1 satisfies this limitation. *See, e.g.*, Final Action, page 8. However, *Daniel*'s ITS 13 of its alleged "first" or "indoor" subsystem performs both analog and digital processing. *See* column 3, lines 52-55. Specifically, *Daniel*'s

ITS 13 includes subscriber interface 16, which includes physical interfaces for telephone service (POTS or plain old telephone service). *Id.* Further, *Daniel* contemplates a configuration where its system comprises between 2 to 6 POTS lines. *Id.* at column 3, lines 53-62. It is well known in the art that POTS is an *analog* voice service. See Bruce Hallberg, Networking: A Beginner's Guide 84 (2005) ("POTS transmits analog signals, not digital ones." (emphasis added)). As such, contrary to the Examiner's assertion, *Daniel*'s ITS 13 performs analog processing in transmitting data to its subscriber transceiver unit (STRU) 14. Hence, *Daniel* does not disclose a first subscriber subsystem providing "only digital processing," as recited by claims 1, 33, 64, and 70. Neither *Kakuma* nor any other cited references are relied upon as satisfying this limitation, nor do they do so. For at least these reasons, Applicant requests withdrawal of the rejection of record.

Moreover, claim 33, as amended, additionally recites "communicating a synchronous signal via said digital link" (emphasis added). Neither *Daniel* nor *Kakuma* mentions synchronous signals. The Examiner cites to *Cam* to reject this limitation in other claims. See, e.g., Final Action, page 15. However, at the Examiner's citation, *Cam*'s disclosure describes its goal as to "provide data recovery in the presence of skew between parallel data lines." See *Cam*, page 1, paragraph 10 (emphasis added). That is, *Cam*'s data transfer between various integrated circuits, e.g., digital interfaces, occurs in a non-synchronous fashion that requires correction at the receiving interface. See *id.* page 2, paragraph 14 (stating "a training control pattern may be sent sufficiently often in order to allow a receive interface to check and correct for de-skew."). Specifically, although the transmitting end of the data path in *Cam* sends the data and control signals at the same time, the data and control signals do not travel synchronously. Instead, they are sent at the same time so that the receiving end can check and correct for any skewing that occurs between the data and control signals. That is, the data and control signals start out at the same time, travel non-synchronously, and end up at the receiver at different times, and the receiver uses this difference in arrival times to de-skew. As such, *Cam* actually discloses communicating a non-synchronous signal via digital links, which is the opposite of the recited limitation, by providing a solution for non-synchronous data between digital interfaces. Also, Applicant respectfully notes that a prior art reference must be considered in its entirety, i.e., as a

whole, including portions that would lead away from the claimed invention. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); *see also* M.P.E.P. § 2141.02 (VI). Consequently, the Examiner's assertion that it is well known that training overhead bit patterns are used to synchronize timing between SONET devices are moot because of the contrary teachings in *Cam*. *See* Final Action, page 25. Therefore, *Cam* simply does not disclose synchronous communication between digital interfaces, as recited by the claim. Moreover, neither *Daniel* nor *Kakuma* is relied upon to satisfy this limitation, nor do they do so. For at least these reasons, Applicant requests withdrawal of the rejection of record.

Further, claims 64 and 70 additionally recite "wherein all processing of analog signals performed by said system is performed by said first outdoor subsystem" (emphasis added). The Examiner cites to column 4, lines 9-16 and Figure 1 of *Daniel* as satisfying this limitation. *See, e.g.*, Final Action, page 5. Further, the Examiner states that "the fact that digital processing is also performed by [*Daniel*'s] STRU 14 does not preclude STRU 14 from also performing 'all analog processing' as claimed." *See id.* at page 22. While this assertion may be true, the fact that *Daniel*'s STRU 14 performs both analog and digital processing does not automatically result in STRU 14 performing all analog processing as claimed. To the contrary, as discussed above, *Daniel*'s ITS 13 also performs analog processing by virtue of its interface with POTS phone lines. Logically then, *Daniel*'s STRU 14 cannot perform "all analog processing," as recited by claims 64 and 70, because analog processing is also being performed at *Daniel*'s ITS 13. Neither *Kakuma* nor any other cited references are relied upon as satisfying this limitation, nor do they do so. For at least these reasons, Applicant requests withdrawal of the rejection of record.

Dependent Claims 2, 6, 10, 11-13, 28-32, 36-38, and 42

Claims 2, 10, 11-13, 28-32, 36-38, and 42 depend from claims 1 and 33, respectively. Each dependent claim inherits every limitation of the claim from which it depends. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of claims 1 and 33. As such, claims 2, 10, 11-13, 28-32, 36-38, and 42 are patentable at least by virtue of their dependency on claims 1 and 33. Moreover, the dependent claims set forth additional limitations not taught by the combination of *Daniel* and *Kakuma*.

For example, claim 10 recites “wherein said second subscriber subsystem provides all analog processing of said subscriber data provided by said system” (emphasis added). As discussed above with respect to claims 64 and 70, *Daniel*’s STRU 14 does not perform “all analog processing” as claimed because ITS 13 also performs analog processing of POTS signals. Neither *Kakuma* nor any other cited references are relied upon as satisfying this limitation, nor do they do so. For at least these reasons, Applicant requests withdrawal of the rejection of record.

With respect to claims 11-13, 28-31, 32, and 37, the Examiner includes the rejection of these claims under the heading of being unpatentable over *Daniel* in view of *Kakuma*. However, in the rejection for each of these claims, the Examiner acknowledges that the combination of *Daniel* and *Kakuma* does not specifically disclose the limitations recited by each of claims 11-13, 28-31, 32, and 37. *See*, Final Action, pages 9-11. Instead, the Examiner states that the limitation of each claim is “old and well known in the art and would have been obvious to one of ordinary skill.” *Id.* Applicant respectfully notes that this is improper. Applicant points out that according to Office Policy under M.P.E.P. § 2144.03, “[i]t is never appropriate to rely solely on ‘common knowledge’ in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based.” *In re Zurko*, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) (emphasis added). By acknowledging that the combination of *Daniel* and *Kakuma* does not disclose the recited limitation, the Examiner has failed to provide principal evidentiary support for these rejections. Instead, the Examiner has principally relied on “common knowledge” as the primary evidence for rejecting these claims. As such, the rejection of claims 11-13, 28-31, 32, and 37 does not comply with Office Policy. Therefore, Applicant requests either the Examiner provide evidentiary support or withdrawal of the rejection of record.

B. Claims 3 and 39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* in further view of *Eyuboglu*.

Claims 3 and 39 depend from claims 1 and 33, respectively. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of claims 1 and 33. Moreover, *Eyuboglu* is not relied upon to satisfy the missing limitations, nor does it do so. As

such, these claims set forth limitations not satisfied by the Examiner's proposed combination. Also, these claims set forth limitations making them patentable in their own right.

For example, claim 3 recites "wherein said general purpose protocol comprises Ethernet" and claim 39 recites "wherein an interface protocol utilized in coupling said first signal processing subscriber subsystem to said data communication backbone comprises Ethernet." The Examiner points to *Eyuboglu*, at paragraph [0005], as satisfying these limitations. See Final Action, page 11. As Applicant has noted in the previous Response, at the Examiner's citation, *Eyuboglu* describes using Ethernet at the backhaul side of a network. The backhaul side of a network is not applicable to a subscriber subsystem located at a subscriber location, as set forth in the claims. Moreover, in the context of the Examiner's interpretation, the backhaul side of the network would apply to *Daniel*'s Wireless Line Transceiver (WLT) 1, which the Examiner does not equate to Applicant's invention. As such, the proposed combination would result in *Daniel*'s WLT 1 having an Ethernet backhaul. However, according to the Examiner's interpretation, *Daniel*'s ITS 13—not *Daniel*'s WLT 1—is the equivalent of the claimed "first" subsystem, which has the Ethernet protocol as claimed. As such, the proposed combination does not satisfy the limitations of the general purpose protocol of the "first" subsystem comprising Ethernet. In response to Applicant's argument, the Examiner states "both a network backhaul and subscriber backhaul are similar links performing similar functions." See Final Action, pages 22-23. Even if this assertion is true, which Applicant does not concede, the proposed combination still does not satisfy the recited limitations. For at least the reasons set forth above, the Examiner's proposed combination does not satisfy every claim limitation. Therefore, Applicant requests withdrawal of the rejection of record.

C. Claims 4 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Marin*.

Claims 4 and 40 depend from claims 1 and 33, respectively. As shown above, *Daniel* does not satisfy every limitation of claims 1 and 33. Moreover, *Marin* is not relied upon to satisfy the missing limitations, nor does it do so. As such, these claims set forth limitations not satisfied by the Examiner's proposed combination. Also, these claims set forth limitations making them patentable in their own right.

For example, claim 4 recites “wherein said general purpose protocol comprises SONET” and claim 40 recites “wherein an interface protocol utilized in coupling said first signal processing subscriber subsystem to said data communication backbone comprises SONET.” The Examiner points to *Marin*, at paragraph [0025], as satisfying these limitations. *See* Final Action, page 12. However, at the Examiner’s citation, *Marin* describes using SONET at the backhaul side of a network. As discussed above, the backhaul side of a network is not applicable to a subscriber subsystem located at a subscriber location. Moreover, the Examiner’s proposed combination would result in *Daniel*’s WLT 1 having SONET backhaul where *Daniel*’s ITS 13 is the alleged equivalent of the claimed “first” subsystem. As such, the proposed combination does not satisfy the limitations of the general purpose protocol of the “first” subsystem comprising SONET. Even if Applicant accepts the Examiner’s assertion that “both a network backhaul and subscriber backhaul are similar links performing similar functions,” the proposed combination still does not satisfy the limitations. For at least the reasons set forth above, the Examiner’s proposed combination does not satisfy every claim limitation. Therefore, Applicant requests withdrawal of the rejection of record.

D. Claims 7, 8, 62, 63, 67, and 73, are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* and *Kakuma* in view of *Dapper*.

Improper Combination

The disclosures of the references are insufficient to render the claims *prima facie* obvious where the combination of the references requires substantial reconstruction and redesign of the primary reference or the combination would change the principle of operation of the primary reference. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959); *see also* M.P.E.P. § 2143.01. As an initial matter, Applicant notes that the combination of *Daniel* and *Kakuma* is improper for the reasons stated above. Further, as discussed in the previous Response, combining *Daniel* with *Dapper*, as proposed by the Examiner, would require substantial redesign and reconfiguration of *Daniel*. Even if Applicant agrees with the Examiner that “there is proper motivation to combine the teachings of *Daniel* and *Dapper*,” the existence of a motivation does not change the fact that the combination still would require significant modifications to *Daniel*. As such, the substantial changes to *Daniel* render the teachings of the references insufficient to make the claims obvious.

Contrary to the Examiner's assertion that the combination would be an obvious substitution, *Daniel's* system and *Dapper's* system employ different technologies, and as such, are incompatible with each other without substantial modifications to the hardware, circuitry and software of the system. By way of example, with CDMA a user shares an entire spectrum of a channel, and each user is assigned a code. With OFDM, each user uses only a subset of the spectrum, but uses that subset exclusively. As such, the circuitry involved with OFDM must perform different functions such as Inverse Fast Fourier Transforms (IFFT) or Fast Fourier Transforms (FFT). Moreover, the software codes and algorithms used in *Daniel's* devices would also have to be changed. The algorithms and code in *Daniel* are currently written for CDMA. However, as known in the art, OFDM would require different algorithms and codes. The codes and algorithms cannot simply be substituted, since *Daniel* with *Dapper* would be required to handle both OFDM and CDMA. Thus, all the algorithms and codes for all the devices would need to be rewritten. From the above, it is clear that *Daniel* would have to be completely redesigned and reconfigured to be effectively combined with *Dapper*. Thus, the proposed combination of *Daniel* with *Dapper* is insufficient to render the claims *prima facie* obvious.

Failure to Satisfy Every Claim Limitation

Claims 7, 8, 62, 63, 67, and 73 inherit every limitation of the claims from which they depend. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of independent claims 1, 33, 64, and 70. Moreover, *Dapper* is not relied upon to satisfy the missing limitations, nor does it do so. As such, these claims set forth limitations not satisfied by the Examiner's proposed combination. Also, these claims set forth limitations making them patentable in their own right.

For example, claim 7 recites "wherein said first subscriber subsystem comprises an OFDM digital modem." Claim 62 recites a similar limitation. The Examiner points to *Dapper* to satisfy an OFDM modem. *See* Final Action, pg. 8. As an initial matter, Applicant notes that the following arguments have been set forth in the previous Response; however, the Examiner fails to address Applicant's arguments in the Final Action. As such, Applicant reiterates the arguments. Applicant points out that *Daniel* expressly discloses that its CDMA modem 22 is in

its outdoor unit, which the Examiner equates to the claimed “second subscriber subsystem.” See *Daniel*, Figure 1. However, the claims expressly set forth a modem in the “first subscriber subsystem,” which the Examiner equates to *Daniel*’s indoor unit. As such, even accepting the Examiner’s rationale, the proposed combination would not satisfy every claim limitation. That is, at best, the Examiner’s combination would result in a second subscriber system comprising an OFDM digital modem, which is at odds with a “first subscriber system comprises an OFDM digital modem,” as set forth in the claims. Further, neither *Daniel* nor *Kakuma* is relied upon to satisfy these limitations, nor do they do so. For at least these reasons, Applicant requests withdrawal of the rejection of record.

- E. Claims 9, 14, 34, 45, 65, 68, 71, and 74 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of *Zendle*.

No Motivation to Modify *Daniel* in view of *Zendle*

As an initial matter, Applicant notes that the combination of *Daniel* and *Kakuma* are improper for the reasons stated above. Further, the teachings of *Daniel*, *Kakuma*, and *Zendle* is insufficient to render the claims obvious because doing so would change the principle of operation of *Daniel*. If the “suggested combination of references would require a substantial reconstruction and redesign of the element shown in [the primary reference] as well as change the basic principle under which the [primary reference] construction was designed to operate,” the teachings of the references are insufficient to render the claims obvious. *In re Ratti*, 270 F.2d 810, 813 (CCPA 1959); *see also* M.P.E.P. § 2141.01. Contrary to the Examiner’s assertion that *Daniel* fails to disclose any specific type of link to use (*see* Final Action, page 24), *Daniel* explicitly describes that the only connection between its ODU and IDU is a serial connection, with no indication of a fiber optic interface. See *Daniel*, column 4, lines 9-16. As such, according to the Examiner’s rationale, one of ordinary skill in the art would not have been motivated to look elsewhere to determine what specific type of link to use. See Final Action, page 24. Moreover, modifying *Daniel* to implement a fiber optic connection would require, in most cases, exchanging the IDU and ODU terminal electronics. In any case, doing so would require at least the addition of modular units to the existing equipment. Such an exchange or addition could not be achieved without considerable expense. The proposed modification to

Daniel's system would require reconfiguration, from the backhaul to the customer site, to account for newly formed bandwidth bottlenecks, and the like. In any case, manually testing the circuits at each customer location would be required to ensure proper functionality after the change. In view of the above, the teachings of the references are insufficient to render the claims obvious. Therefore, Applicant requests that the rejection be withdrawn.

Failure to Satisfy Every Claim Limitation

Claims 9, 14, 34, 45, 65, 68, 71, and 74 inherit every limitation of the claims from which they depend. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of independent claims 1 and 33. Moreover, *Zendle* is not relied upon to satisfy the missing limitations, nor does it do so. As such, these claims set forth limitations not satisfied by the Examiner's proposed combination. Also, these claims set forth limitations making them patentable in their own right.

For example, claim 45 recites "said another digital link comprises a fiber optic link." The limitation of "another digital link" in claim 45 refers to the digital link between the first signal processing subscriber subsystem and the third signal processing subsystem of claim 44. The Examiner points to *Zendle*, at col. 10 lines 10-41, as satisfying this limitation. *See* Final Action, page 14. Moreover, the Examiner asserts that "*Zendle* teaches using a fiber optic link to link an outdoor subsystem to an indoor subsystem," so it would be obvious to "use the same type of link to link a second outdoor unit to an indoor unit." *See id.* at page 24. However, the Examiner's assertion ignores the fact that *Zendle* is wholly silent as to a "second outdoor unit." As such, *Zendle*'s system has only one digital link between its indoor and outdoor units, and not "another digital link" as recited by claim 45. Moreover, neither *Daniel* nor *Kakuma* is relied upon to satisfy this limitation, nor do they do so. For at least these reasons, Applicant requests withdrawal of the rejection of record.

F. Claims 15-20, 47, 66, and 72 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view *Cam*.

Claims 15-20, 47, 66, and 72 depend from claims 1, 33, 64, and 70, respectively, and inherit every limitation therefrom. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of claims 1, 33, 64, and 70. Moreover, *Cam* is not relied upon to satisfy the missing limitations, nor does it do so. As such, these claims set forth limitations not satisfied by the Examiner's proposed combination. Also, these claims set forth limitations making them patentable in their own right.

For example, claim 15 recites "wherein said communication of subscriber data via said first and second digital interfaces is synchronous" (emphasis added). Claims 66 and 72 recite a similar limitation. The Examiner points to *Cam*, at page 1, paragraph 10 and page 2, paragraph 16, as satisfying this limitation. See Final Action, pages 15-16. However, at the Examiner's citation, *Cam*'s disclosure describes its goal as to "provide data recovery in the presence of skew between parallel data lines." See *Cam*, page 1, paragraph 10 (emphasis added). That is, *Cam*'s data transfer between various integrated circuits, e.g., digital interfaces, occurs in non-synchronous fashion that must be corrected at the receiving interface. See *id.* pg. 2, paragraph 14 (stating "a training control pattern may be sent sufficiently often in order to allow a receive interface to check and correct for de-skew."). Specifically, although the transmitting end of the data path in *Cam* sends the data and control signals at the same time, the data and control signals do not travel synchronously. Instead, they are sent at the same time, so that the receiving end can check and correct for de-skew. *Id.* at pg. 2, paragraph 16. That is, the data and control signals start out at the same time, travel non-synchronously, and end up at the receiver at different times, and the receiver uses this difference in arrival times to correct for de-skew. As such, *Cam* actually discloses the opposite of synchronous communication by providing a solution for non-synchronous data between digital interfaces. Also, Applicant respectfully notes that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); see also M.P.E.P. § 2141.02 (VI). Consequently, the Examiner's assertion that it is well known that training overhead bit patterns

are used to synchronize timing between SONET devices are moot because of the contrary teachings in *Cam*. See Final Action, page 25. Therefore, although *Cam* mentions the use of SONET, it simply does not disclose synchronous communication between digital interfaces, as recited by the claims. Moreover, neither *Daniel* nor *Kakuma* is relied upon to satisfy this limitation, nor do they do so. For at least these reasons, Applicant requests withdrawal of the rejection of record.

Claim 18 recites “wherein said synchronous overhead comprises timing bits.” The Examiner points to *Cam*, at paragraph 16, as satisfying this limitation. See Final Action, pages 15-16. As an initial matter, Applicant notes that *Cam* does not disclose synchronous communication for the reasons set forth above. Further, at the Examiner’s citation, *Cam* merely describes a training pattern configurable upon system startup. However, there is no indication that *Cam*’s system, much less its training pattern, satisfies “timing bits” as set forth in the claims. Also, the Examiner asserts that “it is well known that training overhead bit patterns are used to synchronize timing between SONET devices.” See Final Action, page 25. However, the Examiner neither takes official notice of this alleged “well known” fact nor does the Examiner provide support for such assertion, pursuant to Office Policy. Moreover, the Examiner makes the conclusory statement that “training overhead bit patterns of *Cam* are timing bits, as claimed” based on the unsupported “well known” fact. Because *Cam* utilizes SONET applications with non-synchronized transmissions, *Cam* actually teaches away from using training overhead bits to synchronize timing, as the Examiner asserted. As such, *Cam* simply fails to disclose the limitation “synchronous overhead comprises timing bits,” and there is no motivation to combine *Daniel* and *Cam*. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejection of record.

Claim 47 recites “communicating a synchronous signal via said digital link to enable media access control to be provided by said first signal processing subscriber subsystem with respect to a physical link utilized by said second signal processing subscriber subsystem.” The Examiner point to *Cam*, at paragraph 16, as satisfying this limitation. See Final Action, pages 15-16. However, at the Examiner’s citation, *Cam* merely describes a training pattern

configurable upon system startup. There is no indication that *Cam*'s system, much less its training pattern, satisfies enabling media access control, as set forth in the claims. The Examiner asserts that "*Cam* discloses using SONET to communicate a synchronous signal via a digital link." See Final Action, page 26. Moreover, the Examiner states that the limitation of enabling of media access control "is merely an intended result" of the synchronous communication. *Id.* For the reasons stated above, *Cam* does not disclose synchronous communication via a digital link. Instead, the communication in *Cam* is non-synchronous, or skewed, and *Cam* provides a solution to correct the problem, i.e., de-skew. As such, the non-synchronous communication by *Cam* does not enable media access control since, according to the Examiner's rationale, non-synchronous communication does not have this intended result. Therefore, *Cam* does not disclose this limitation. Accordingly, Applicant respectfully requests that the Examiner withdraw the 35 U.S.C. § 103(a) rejection of record.

G. Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and *Cam* and further in view of *Barsheshet*.

Claim 21 depends from claim 1 and inherits every limitation therefrom. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of claim 1. Moreover, *Barsheshet* and *Cam* are not relied upon to satisfy the missing limitations, nor do they do so. As such, this claim sets forth limitations not satisfied by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

H. Claims 22, 43, 44, 69, and 75 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of *Woodhead*.

Claims 22, 43, 44, 69, and 75 depend from claims 1, 33, 64, and 70, respectively, and inherit every limitation therefrom. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of claim 1. Moreover, *Woodhead* is not relied upon to satisfy the missing limitations, nor does it do so. As such, these claims set forth limitations not satisfied by the Examiner's proposed combination. Also, these claims set forth limitations making them patentable in their own right.

For example, claim 22 recites “a third subsystem having a third subscriber data interface and a third digital interface.” Claims 43, 44, 69, and 75 recite similar limitation. In the Final Action the Examiner points to *Woodhead* to satisfy these limitations. See Final Action, page 17-19. Moreover, the Examiner asserts that “*Daniel* discloses a base station and subscriber station having similar construction and corresponding similar components,” so “one of ordinary skill in the art would be motivated to look at teachings for improving both subscriber stations and base stations when looking to improve upon the subscriber station of *Daniel*.” See *id.* at page 26. However, the Examiner’s assertion ignores the fact that the combination of *Daniel* and *Woodhead* simply does not satisfy the recited limitation. Instead, combining the teachings of *Woodhead* with *Daniel*’s system, as proposed by the Examiner, would result in *Daniel*’s base station 1 having multiple subsystems, which is clearly not the same as the limitation of the claims that are directed at a subscriber subsystem. That is, the product of the proposed modification to *Daniel* is not the same as the limitation of a third subsystem having a third subscriber data interface and a third digital interface (emphasis added). As such, even if one in the art would be motivated to combine *Woodhead* and *Daniel*, the combination of the references simply does not satisfy this limitation. Therefore, Applicant requests withdrawal of the rejection of record.

I. Claims 23-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and *Woodhead* in further view of *Schilling*.

Claims 23-27 depend from claim 1 and inherit every limitation therefrom. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of claim 1. Moreover, *Woodhead* and *Schilling* are not relied upon to satisfy the missing limitations, nor do they do so. As such, these claims set forth limitations not satisfied by the Examiner’s proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

For example, claim 24 recites “wherein said third digital interface is also coupled to said first digital interface via a connection not made through said second digital interface.” As best understood, the Examiner relies upon *Woodhead* to satisfy this limitation. See Final Action, page 20. However, for reasons similar to those set forth above with respect to claim 22, the Examiner’s proposed combination is not sufficient under 35 U.S.C. § 103. The combination of

Woodhead with *Daniel*'s system, as proposed by the Examiner, would result in *Daniel*'s base station 1 having multiple subsystems, which is clearly not the same as the limitation of a third subsystem having a third subscriber data interface and a third digital interface (emphasis added). Therefore, Applicant requests withdrawal of the rejection of record.

With respect to claims 26 and 27, the Examiner has failed to establish a *prima facie* case of obviousness for each of these claims. The Examiner admits that the combination of *Daniel*, *Kakuma*, *Woodhead*, and *Schilling* does not satisfy each limitation. However, in an attempt to satisfy every claim limitation, the Examiner merely opines that each limitation set forth in these claims "is old and well known in the art." See, e.g., Final Action, page 20. Applicant notes that the Examiner does no more than provide a general statement that the claims are obvious. Applicant respectfully notes that this is improper. Applicant points out that according to Office Policy under M.P.E.P. § 2144.03, "[i]t is never appropriate to rely solely on 'common knowledge' in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based." *In re Zurko*, 258 F.3d 1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) (emphasis added). By acknowledging that the combination of *Daniel*, *Kakuma*, *Woodhead*, and *Schilling* does not disclose the recited limitation, the Examiner has failed to provide principal evidentiary support for these rejections. Instead, the Examiner has principally relied on "common knowledge" as the primary evidence for rejecting these claims. As such, the rejection of claims 26-27 do not comply with Office Policy. Therefore, Applicant requests either the Examiner provide evidentiary support or withdrawal of the rejection of record.

J. Claims 41 and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Daniel* in view of *Kakuma* and in further view of *Barsheshet*.

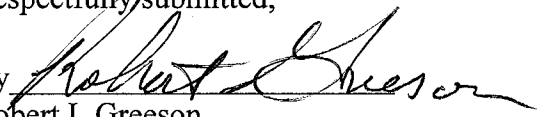
Claims 41 and 46 depend from claim 33 and inherit every limitation therefrom. As shown above, the combination of *Daniel* and *Kakuma* does not satisfy every limitation of claim 33. Moreover, *Barsheshet* is not relied upon to satisfy the missing limitations, nor does it do so. As such, these claims set forth limitations not satisfied by the Examiner's proposed combination. Therefore, Applicant requests withdrawal of the rejection of record.

IV. CONCLUSION

In view of the above, Applicant believes the pending application is in condition for allowance. Fees in the amount of \$245 are submitted herewith for a petition for two-month extension of time. Please charge any additional fees required or credit any overpayment to Deposit Account No. 06-2380, under Order No. 68144/P007US/10501224 from which the undersigned is authorized to draw during the pendency of this Application pursuant to 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.

Dated: July 10, 2009

Respectfully submitted,

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